

Listing of Claims

Claims 1-26 (Canceled)

Claim 27 (currently amended): A hollow chemical vapor deposited monolithic silicon carbide shell having an external perimeter ~~in excess~~ of 50 inches or greater and an aspect ratio of 50 or greater.

Claim 28 (previously presented): The hollow chemical vapor deposited monolithic silicon carbide shell of claim 27 having a cylindrical shape.

Claim 29 (previously presented): The hollow chemical vapor deposited monolithic silicon carbide shell of claim 27 having a frustoconical shape.

Claim 30 (previously presented): The hollow chemical vapor deposited monolithic silicon carbide shell of claim 27, wherein the density of said chemical vapor deposited monolithic silicon carbide is at least 3.15 grams per cubic centimeter.

Claim 31 (canceled)

Claim 32 (previously presented): The hollow chemical vapor deposited monolithic silicon carbide shell of claim 27, wherein an external perimeter of said hollow shell is in excess of 65 inches.

Claim 33 (previously presented): The hollow chemical vapor deposited monolithic silicon carbide shell of claim 27, wherein said aspect ratio is 200 or greater.

Claim 34 (previously presented): The hollow chemical vapor deposited monolithic silicon carbide shell of claim 27, wherein said aspect ratio is 100 or greater.

Claim 35 (currently amended): A hollow chemical vapor deposited monolithic silicon carbide shell made according to a process comprising:

- a) providing a silicon carbide precursor gas in proximity to a surface of a solid substrate and an isolation device adjacent the solid substrate on a rotating platform in a deposition chamber, the solid substrate and the isolation device are separated by a boundary zone,
- b) rotating the rotating platform with the solid substrate and isolation device,
- c) reacting silicon carbide precursor gas during rotation to provide a silicon carbide deposit on the surface of the substrate and on the isolation device

such that the silicon carbide deposit does not bridge the boundary zone between the solid and the isolation device, and

- d) removing the silicon carbide deposit to provide a hollow chemical vapor deposited monolithic silicon carbide shell without propagating cracks having an external perimeter of 50 inches or greater and an aspect ratio of 50 or greater.

Claim 36 (new): The hollow chemical vapor deposited monolithic silicon carbide shell of claim 27, wherein a diameter of the shell is 18 inches or greater.

Claim 37 (new): A hollow chemical vapor deposited monolithic silicon carbide shell having an external perimeter of 50 inches or greater, an aspect ratio of 50 or greater and without propagating cracks.